

R<sup>2</sup> is selected from Arg, Lys, Ala, Orn, Ser(Ac), Sar, D-Arg and D-Lys;

R<sup>3</sup> is selected from the group consisting of Val, Ala, Leu, norLeu, Ile, Gly, Pro, Aib, Acpc, Lys and Tyr;

R<sup>4</sup> is selected from the group consisting of Tyr, Tyr(PO<sub>3</sub>)<sub>2</sub>, Thr, Ser, Ala, homoSer and azaTyr;

R<sup>5</sup> is selected from the group consisting of Ile, Ala, Leu, norLeu, Val and Gly;

R<sup>6</sup> is selected from the group consisting of His, Arg or 6-NH<sub>2</sub>-Phe;

R<sup>7</sup> is selected from the group consisting of Pro or Ala; and

R<sup>8</sup> is selected from the group consisting of Phe, Phe(Br), Ile and Tyr;

excluding sequences including R<sup>4</sup> as a terminal Tyr group, and

wherein the active agent is not SEQ ID NO:1 or SEQ ID NO:19,

for a time and under conditions effective to augment erythropoiesis.

B1  
Conclude

---

40.(Amended) The method of claim 1 wherein the contacting occurs in vivo and a dosage of active agent is between 0.1 ng/kg and 10.0 mg/kg.

B2

---

41.(Amended) The method of claim 1 wherein the contacting occurs in vitro and a dosage of active agent is between 0.1 ng/ml and 10.0 mg/ml.

---

*Please add the following new claims:*

B3

---

45.<sup>3</sup>(New) The method of claim 43, wherein the anemia is associated with chronic renal failure.

46.<sup>4</sup>(New) The method of claim 43,<sup>1</sup> wherein the anemia is associated with end-stage renal disease.